What is claimed is:

1. A host-NVRAM disk-array controller that can be connected to a host computer, the controller comprising:

an NVRAM connected to a memory controller (together called the NVRAM device), the host computer having the ability to directly control the NVRAM device;

a plurality of disk array controllers;

a plurality of buses connecting the NVRAM device and the disk array controllers.

2. A device of claim 3, wherein the memory controller can act as a DMA master.

3. A method for using the controller of claim 2, the method comprising of the host computer programming the NVRAM controller as a DMA master for transferring data between host memory and NVRAM.

4. A method for using the controller of claim 1, the method comprising of transferring data directly between NVRAM and the disk array controllers using DMA on the memory controller or on the disk array controllers.

5. A method for using the controller of claim 1, the method comprising of the host computer performing steps:

allocating memory from NVRAM or recognizing during booting that the memory was previously allocated;

optionally writing or updating data in NVRAM from host memory;

optionally scheduling data transfers from NVRAM to the disk array controllers;

optionally scheduling data transfers from the disk array controllers to NVRAM;

optionally reading data from NVRAM to host memory;

freeing memory from NVRAM with or without first writing to the disk array controllers.

6. A device of claim 1, wherein there is only one disk controller.

7. A device of claim 1, wherein the memory controller is on a separate bus from the disk controllers to allow it to operate at a different speed and using a different bus protocol.

8. A device of claim 7, wherein the NVRAM controller is on a PCI 2.2 bus and the disk controllers are on faster PCI-X buses.

9. A device of claim 1, wherein the buses used are Conventional PCI, PCI-X, and PCI Express buses.

10. A device of claim 1, wherein the disk controllers are SCSI controllers.

11. A device of claim 1, wherein the disk controllers are SATA controllers.

12. A device of claim 1, wherein the disk controllers are Fibre Channel controllers.

13. A device of claim 1, wherein the NVRAM is battery-backed SDRAM.

14. A device of claim 1, wherein the NVRAM can operate from external power.

15. A device of claim 1, wherein the NVRAM can preserve data without any power.